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PENSOFT

Apostolepis multicincta Harvey 1999 (Squamata, Dipsadidae) in Argentina

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Abstract
Apostolepis multicincta, a fossorial snake known only from Bolivia, is recorded in Argentina, extending its known range 450 km south of the previous closest record.

Key words
Distribution, new record, snakes, cloud forest.

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Introduction

The genus *Apostolepis* includes about 35 species that mainly inhabit the lowlands of South America east of Andes (Ferrarezi et al. 2005, Wallach et al. 2014, Uetz et al. 2016). *Apostolepis assimilis* (Serie, 1915), *A. dimidiata* (Jan, 1862), and *A. quirogai* (Giraudo and Scrocchi, 1998) have been reported from northeastern Argentina but are poorly known (Giraudo et al. 2012). On the other hand, there are no records of *Apostolepis* from northwestern Argentina and presence of the genus is only presumed (Cei 1993). *Apostolepis multicincta* Harvey 1999, previously known from the Bolivian departments Santa Cruz and Cochabamba, (Harvey 1999, Mendoza et al. 2017), had not been recorded from Argentina until now.



Figure 1. *Apostolepis multicincta* (FML 28566, male , SVL 341 mm) from El Fuerte, Departament Santa Bárbara, Jujuy, Argentina, 1430 m elevation. Inset shows ventral surface of tail in preserved specimen.

Methods

Standard characters of snake taxonomy and those described and numbered by Harvey (1999) were used

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Figure 2. Details of the head of specimen *Apostolepis multicincta* (FML 28566, male. head length 7.6 mm) from El Fuerte, Departamento Santa Bárbara, Jujuy, Argentina, 1430 m elevation.



Figure 3. Details of the head of FML 28567 (head length 6.3 mm) from El Fuerte, Departamento Santa Bárbara, Jujuy, Argentina, 1430 m elevation.

to identify the specimens. Ventral scales were counted using the method of Dowling (1951). The color was described in life and from fixed specimens. The biogeographical classification of the localities is based on Cabrera (1994). For all measurements, we used the methods of Harvey (1999). We sexed the specimens by subcaudal incision.

The specimens are deposited in the Herpetological collection of the Fundación Miguel Lillo (FML), Tucumán, Argentina.

Results

New records. FML 28566 (Figs 1, 2), and FML 28567 (Fig. 3). El Fuerte, Santa Bárbara district, Province of Jujuy, Argentina, –24.267306 –64.432858, Datum WGS84, 1430 m elev., 29 January 2010, and July 2006, respectively. A. Vilte collector.

The specimens have the following characters mentioned by Harvey (1999) and Mendoza-Miranda et al. (2017):

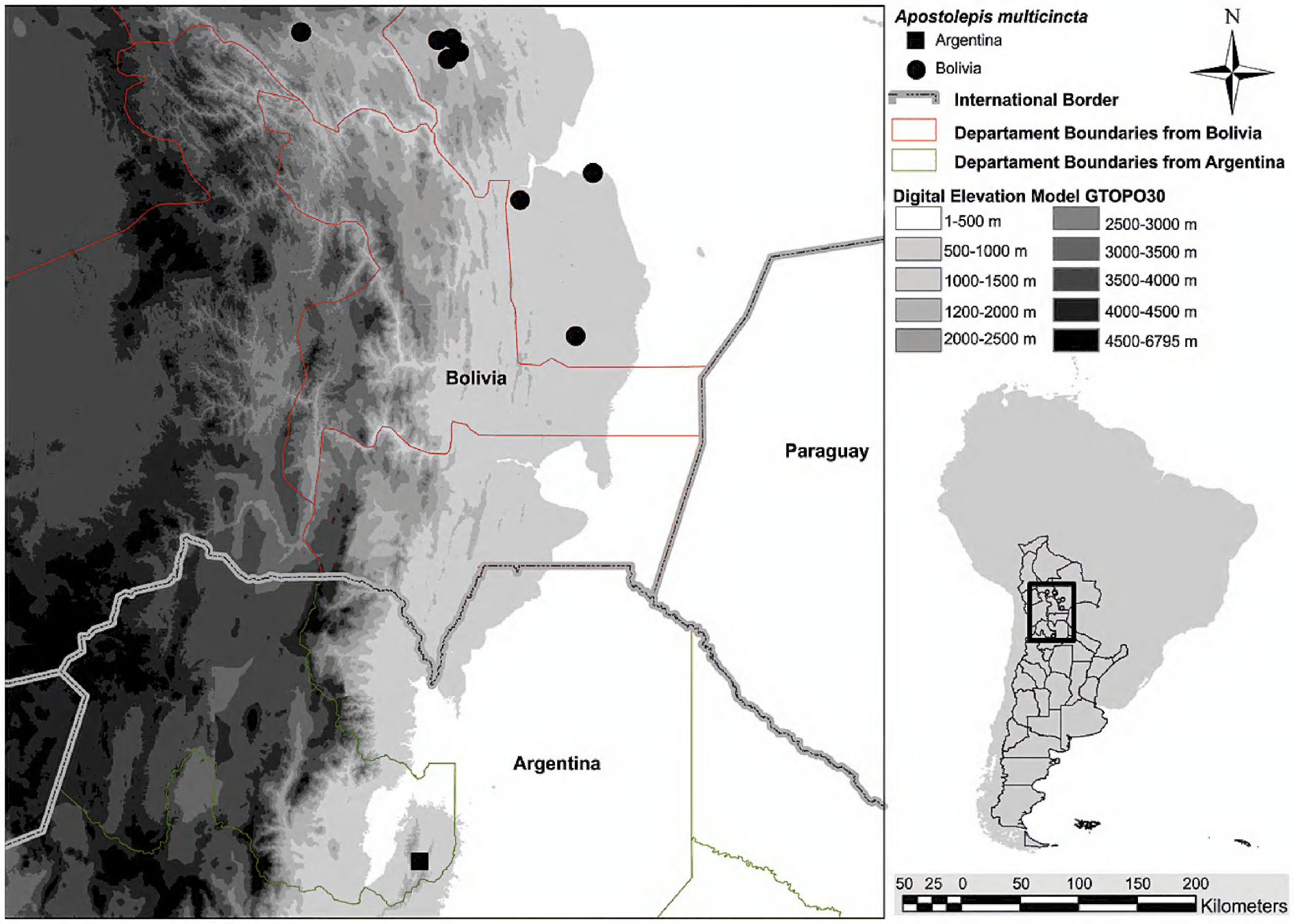


Figure 4. Known distribution of *Apostolepis multicincta* in northwestern Argentina (squares) and Bolivia (circles).

(1) rounded snout, with the length of rostral scale visible from above, about half of its distance to frontal scale; (2) 6 supralabials scales, second and third entering the eye in FML 28567, but only the third in FML 28566; (4) temporals absent; (5) 6 infralabials, 1–3 contacting first chinshield; (6) 212 and 210 ventrals; 37 and 42 subcaudals respectively; (10) dorsal lines absent; (11) live specimens dorsally reddish; creamy white in preserved material.

The specimens have some slight differences compared with the description of Harvey (1999), Embert and Reichle (2003), and Mendoza-Miranda et al. (2017). In the following descriptions the characters of the Bolivian specimens are between parenthesis.

FML 28566. Male. Parietals and supraoculars mostly black, with small, red-orange spots anteriorly, that extends to the rear half of frontals and almost all the prefrontals. The red-orange area forms a band that runs along the nasal, rostral, and first supralabial, with a black area in the rostral tip and around the narines. The light supralabial blotch covers all of the fourth supralabial, half of the third and part of the fifth. White nuchal collar 3–3.5 dorsal scales long (2–2.5 scales), anteriorly bordered by a black collar 1–2 dorsal scales long and followed by a black nuchal collar of only 3 dorsal scales long in the dorsal middle line (4 scales). Black band surrounding the tail, 9 dorsal scales in the vertebral line and with reduction to 6 towards the ventral surface (incomplete and 4–6 scales); the terminal scale reddish in life and ivory white in fixed specimens (gray or white). Six supralabials, the third entering the eye (2–3 in the eye). Nasal and preocular contacting in the left side of the head and separated in the right side by the contact of the second supralabial and the prefrontal (separated in Bolivian specimens). The specimen has six supralabials, the third entering the eye; 6 infralabials, 1–3 contacting first chinshield; 15 dorsals at midbody, 212 ventrals, and 37 subcaudals. Measurements (in mm): snout–vent length 341; tail length 39; head length 7.6; head width 5.3.

FML 28567. Male. Parietals black and spotless, frontals reddish orange anteriorly; the rear half of prefrontals reddish orange; a red band cover most of the rostral and slightly the nasals and the first supralabials; a black spot in the rostral tip. The supralabial blotch occupies the half of the fourth supralabial and a fourth of the third. Chinshields with black dots (immaculate). White nuchal collar 2–3 dorsal scales, bordered by a black anterior collar 2–3 dorsals wide and a posterior black collar 2.5–3 scales wide (4 scales). Black band surrounding the tail, 8 dorsal scales wide in the mid-dorsal line and decreasing to 6 towards ventral surface (incomplete and from 4–6 scales). Terminal scale reddish in life and ivory white in the preserved individual (gray or white). Gular region strongly pigmented, with the first infralabials and mental black, and spotted chinshields (spotless). Nasal and preocular in contact in both sides of the head (separated).

The specimen has 6 supralabials, second and third entering the eye; 6 infralabials, 1–3 contacting first chinshield; 15 dorsals at midbody, 210 ventrals, and 42 subcaudals. Measurements (in mm): snout–vent length 217; tail length 25, head length 6.3; head width 4.1

Discussion

This is the first record of the genus *Apostolepis* from the Province of Jujuy, northwestern Argentina (Fig. 4), and it confirms the presumption of Cei (1993) about the presence of the genus in the region. Although the specimens have slight differences with the characters described by Harvey (1999), they match with *A. multicincta.* These specimens represent the first record of this species from Argentina and extend the known range 468 km south from Ururigua Viejo, Santa Cruz, Bolivia, the nearest locality previously known (Gonzales and Montaño 2009). The Bolivian specimens come from 1290 to 2100 m in areas with bushy vegetation similar to the Chaco biogeographic province (Harvey 1999) in the Inter-Andean Dry Forest and Tucuman-Bolivian Forest life zones (Mendoza-Miranda et al. 2017). The Argentine specimens were collected at an elevation of 1430 m from a sandy stream bank in an intermontane valley of the Santa Barbara hills. The habitat consists of disturbed vegetation of the Montane Forest formation, in the phytogeographic province of the Yungas or Tucumano-Boliviana Forest (Cabrera, 1994).

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Authors' Contributions

FBG, JB, AV, and GS collected the data, wrote the text, and reviewed the text.

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